

## Patent Abstracts of Japan

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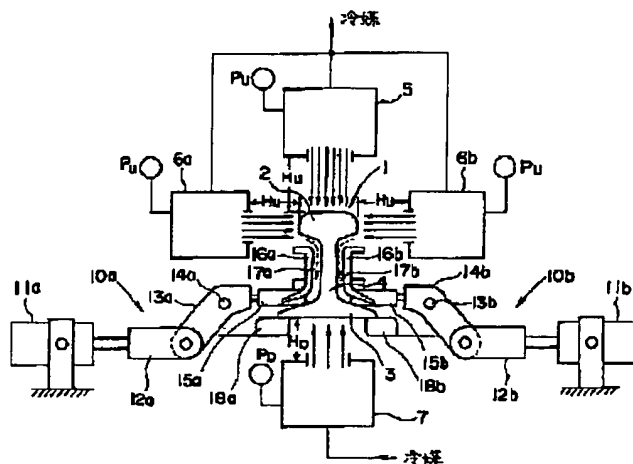
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TITLE : METHOD FOR COOLING HIGH TEMPERATURE RAIL AND DEVICE THEREFOR



**ABSTRACT :** **PURPOSE:** To execute cooling of a high temp. rail without damaging the various characteristics, such as wear resistance, fatigue resistance, and without shape deformation and crack development by introducing cooling medium jetted to the head top surface and the head side surfaces of the high temp. rail into the upper surfaces of a foot part from a web part and further, jetting the cooling medium to the lower surface of the foot part.

**CONSTITUTION:** The high temp. rail 1 having austenitic zone temp. or higher is arranged on a lock base 18 and fixed through a lock member 15 fitted to the tip part of an arm 13 in a clamping device 10 providing a hydraulic cylinder 11. Successively, the cooling medium of the air, etc., is jetted from nozzle headers 5, 6 and the head top surface and the head side surfaces of the head part 2 are cooled to obtain the high strength thereof. Further, the cooling medium jetted thereto is introduced into guide ways 17 formed with guide plates 16 fitted to the lock member 15 and guided to the upper surfaces of the foot part 3 from the side surfaces of the web 4. Together with this, the cooling medium is jetted into the lower surface of the foot part 3 from a nozzle header 7. By this method, the web part 4 and the foot part 3 together with the head part 2 are uniformly cooled to prevented the development of internal stress.

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